

Update on Transportation Agencies, Projects, Issues and Funding for San Antonio

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Executive Summary

Transportation Goals

- Create a holistic plan for transportation network.
- Tie all elements together so functionality, efficiency and effectiveness are achieved.
- Make the most with limited transportation resources.
- Create a common understanding of transportation environment and challenges.
- Ensure users of the transportation network benefit from the system.
- Address local street needs.

San Antonio Economy is Tied to Transportation

- Existing manufacturing
- Medical Center
- Tourism
- Downtown
- Military
- KellyUSA Inland Port
- Brooks City Base
- San Antonio International Airport
- Multimodal freight movement
- Toyota

Future State Funding

Funding from TxDOT will remain constant or shrink with current finance environment.

- Don't expect more funds from TxDOT.
- Local agencies will be expected to treat funding gaps as unfunded mandates.

Recommendations

Staff Recommendation

Must stay engaged in various transportation forums:

- AACOG
- MPO
- SAMCo
- Commuter Rail District
- Regional Mobility Authority
- Austin-San Antonio Corridor Council
- Tex 21
- Texas T-Bone
- SH 130
- Trans Texas Corridor

Concept Issues/Solutions

- Transportation resources are scarce.
- Roadway congestion will get worse.
The solution must be multifaceted to succeed.
- Transportation agencies must get more efficient and effective with limited resources.

Concept Issues/Solutions (cont'd)

- The City is in the transportation business, not just the street maintenance business.
- Other agencies (County, TxDOT, VIA, etc.) are in the transportation business, not just their specific specialty; and must collaborate, communicate, and cooperate to meet our common transportation goals for the community.

Manage first, Build second

- Get as close as possible to 100% utilization of existing transportation infrastructure before investing in new construction.
- \$100 Million investment in transportation system funding over the next 5 years could significantly ease developing congestion on most primary arterials and some freeways in San Antonio.

High Priority Transportation System Improvements

- Traffic Modeling in Key Areas \$ 15 M
- Signal System Improvements (continuous effort in rephasing/ retiming) \$ 10 M
- Arterial Corridor Capacity (Reversible lanes, etc.) \$ 10 M
- Intersection Bottleneck Improvements \$ 15 M
- Transit Improvements (pullout lanes, BRT, priority systems, etc.) \$ 12 M
- Access Management Improvements (median dividers, driveway revisions/ consolidations, decelerations lanes, etc.) \$ 10 M

High Priority Transportation System Improvements, cont'd

• Freeway Incident Management	\$ 11 M
• Freeway Demand Management (ramp metering, ramp re-arrangement, etc.)	\$ 7 M
• Freeway Frontage Road Improvements	\$ 10 M
TOTAL*	\$ 100 M

*All ATD Eligible for VIA, COSA, TxDOT, County, and RMA

Staff Recommendation

- Continue to ensure COSA transportation expertise and focus are maintained.
- Texas Transportation Commission meets in San Antonio January 18.
- Advanced Transportation District issue – possibly before the voters in 2004.
- Air quality non-attainment status – April 2004.
- Right-of-Way preservation and acquisition opportunities must be pursued.
- Congestion will get worse before it gets better; manage infrastructure to minimize congestion.

Staff Recommendation (cont'd)

- Active participation at all levels in the Regional Mobility Authority.
- Grow/develop a culture of collaboration in transportation similar to the ILA for regional flood control; do not accept or allow things to operate otherwise.
- Move toward funding of critical local improvements in concert with other transportation agencies.
- Develop a strategic plan of action for the community.
- A quality transportation system is critical to the future of San Antonio.

Background

COSA Goals



- San Antonio will be a safe and clean community.
- San Antonio will be a city that maximizes its citizens' well-being and human potential while capitalizing on its cultural diversity.
- San Antonio will be a city with a vibrant and diverse economy which will create better jobs with higher salaries while leveraging its historic and physical diversity to assure a sustainable and attractive community.
- San Antonio neighborhoods will prosper through the community's long-term reinvestment and revitalization.
- San Antonio will promote its unique resources to become the premier visitor and convention destination.
- San Antonio will benefit from a city government which is innovative and proactive and utilizes best practices in its administrative, financial and information systems.
- San Antonio will provide the institutional foundation to support government and promote public trust and awareness.

Community Diversity & Prosperity



- In order to form a prosperous, diverse, and vibrant community, we must focus on
 - Economic development
 - Quality of life
 - Long term reinvestment
 - Revitalization

Transportation Goals

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- Address local street needs.

Transportation Goals, cont'd

- Drivers
 - User Expectations
 - Responsibilities
 - Air Quality
 - Innovative Technology
 - Finance

Presentation Outline

- Challenges today
- Transportation partner agencies
- Transportation funding history
- Issues and drivers
- New transportation funding tools
- Staff recommendation

Challenges Today

Challenges Today

- Traffic congestion
- Traffic safety
- Transportation funding
- Developing unified effort among area transportation partners
- Build user support
- To look holistically at transportation to include multiple elements

Traffic Safety

- Traffic Deaths in San Antonio rose in 2002.
 - Highest level in 10 years.

<u>Year:</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Accidents:	142	100	149

- Contributing Factors
 - Speeding
 - Alcohol
 - Congestion
 - Driver Frustration

Community Response for Increased Safety

- Requests for
 - Additional traffic enforcement
 - Speed humps
 - Stop signs
 - Traffic signals
 - School zones
 - Lower speed limits
 - Traffic analyses

Mileage of City Streets

An iceberg floating in a blue sea, used as a metaphor for street mileage distribution. The tip of the iceberg is light blue and contains the text for Freeways. The submerged part is a darker blue and contains the text for Principal Arterials, Minor Arterials, Collectors, and Local Streets.

Freeways 205 CL Miles

Principal Arterials 246 CL Miles

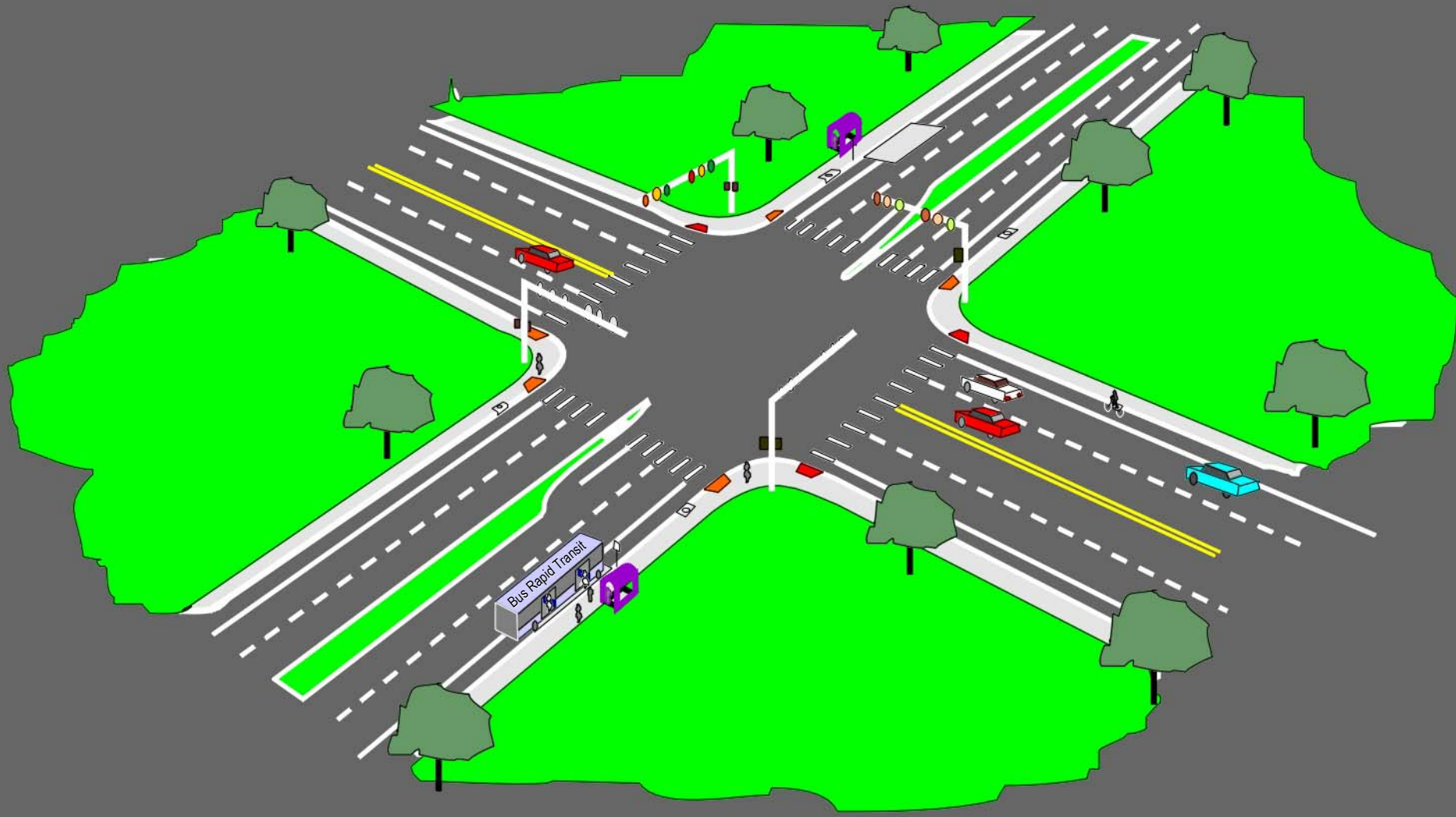
Minor Arterials 403 CL Miles

Collectors 255 CL Miles

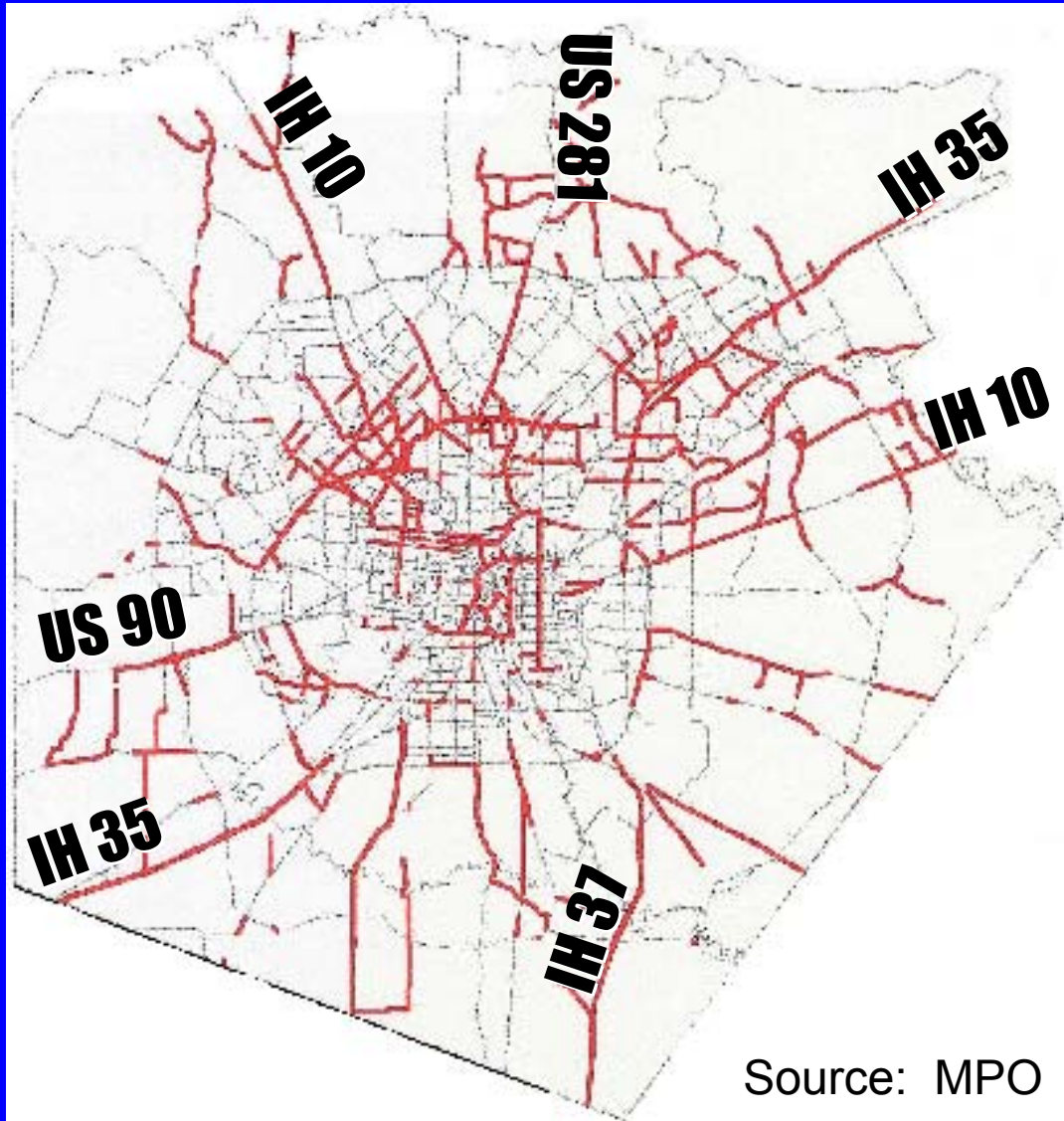
Local Streets 3664 CL Miles

Note: CL Miles = Centerline Miles

Growth of Transportation System



Future Congested Roadways



2025 Forecast

LEGEND

 Volume > Capacity

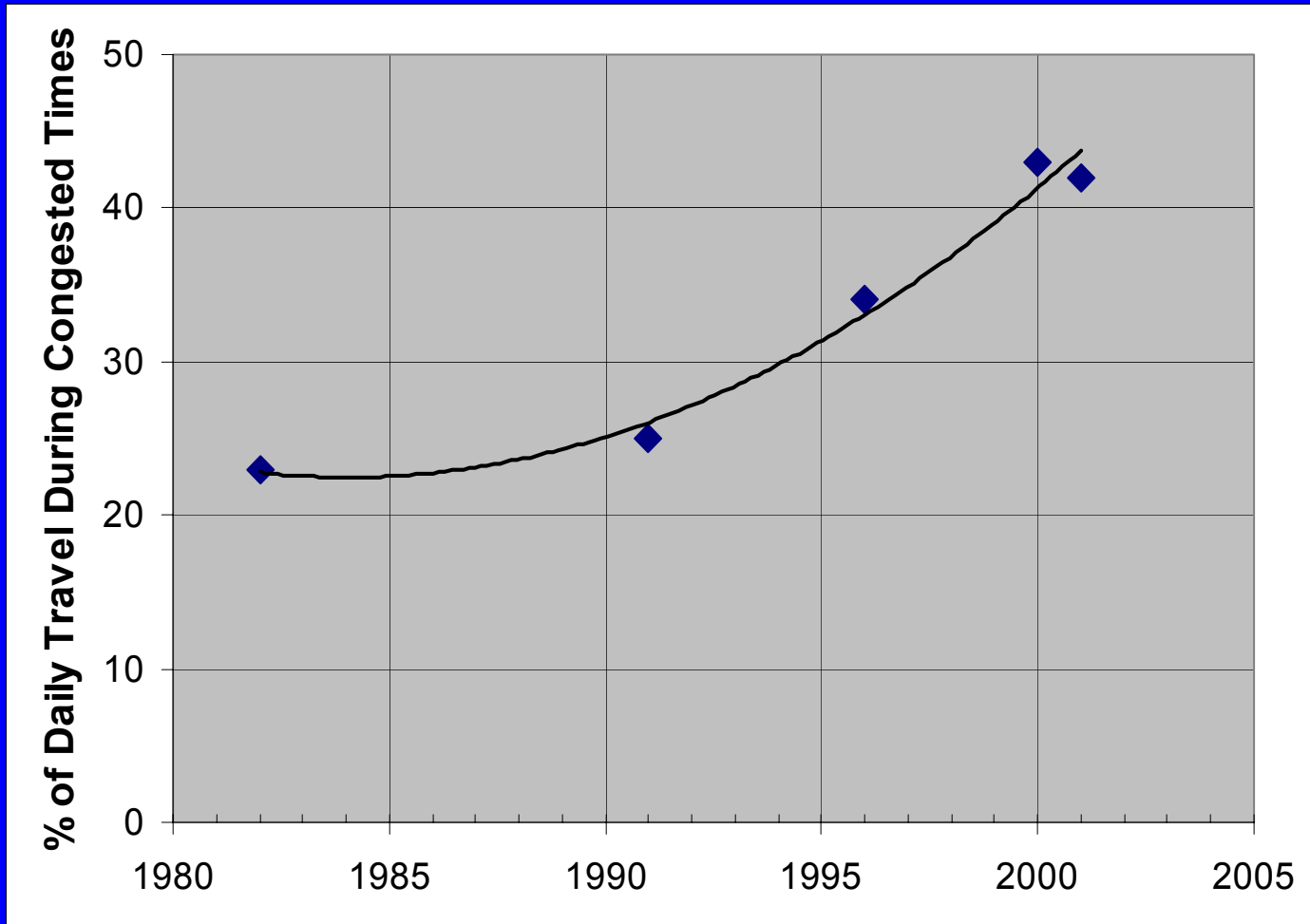
Traffic Congestion in San Antonio is Growing Rapidly

- Congestion impacts
 - Frustration among motorists
 - Lost productivity
 - 2001, in San Antonio, delay cost \$450 Million
 - Wasted fuel
 - 2001, in San Antonio, \$55 Million in fuel was wasted due to congestion
 - Increased traffic crashes

COSA Response

- “Cool Operator” Program
- “Put the Brakes on Fatalities” Day
- Annual School Traffic Safety Summit
- Additional Traffic Enforcement
- Traffic Signal Timing
- Traffic Signal Coordination
- Increase emphasis on traffic accident analysis to reduce/eliminate future accidents
- Traffic Modeling
- Emergency Signal Pre-Emption

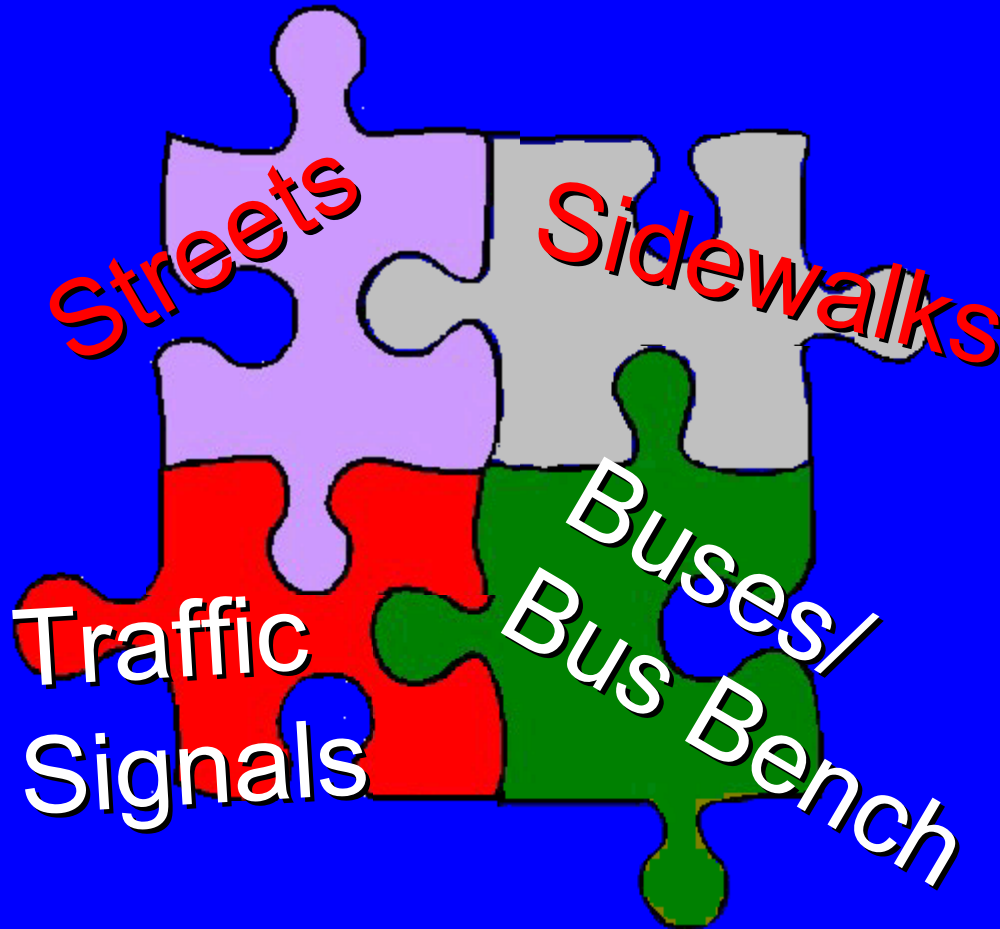
Traffic Congestion in San Antonio is Growing Rapidly



Source: Texas Transportation Institute (<http://mobility.tamu.edu/ums>) 30

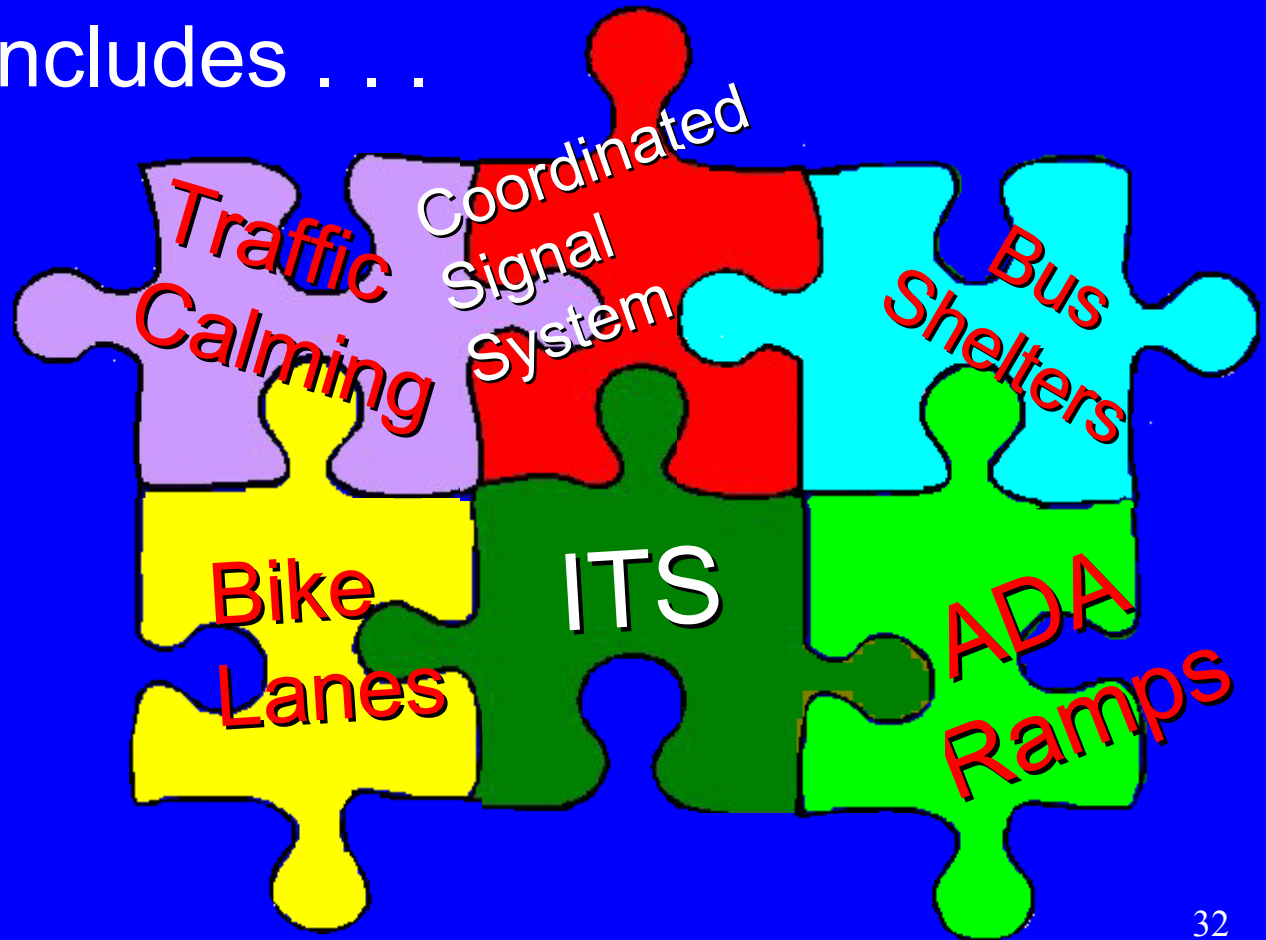
Transportation System

- Historically included . . .



Transportation System

- Currently includes . . .



Transportation System

- Up Coming . . .



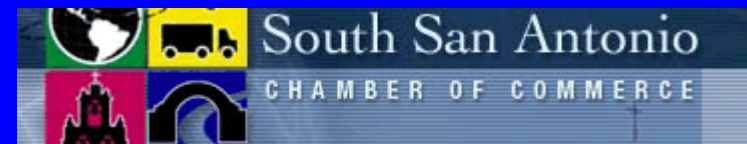
Transportation Partner Agencies



Major Transportation Partners



Alamo Area Council of Governments
AACOG



 THE ALAMO CITY CHAMBER OF COMMERCE



History of MPO

- 1963 The City of San Antonio, Bexar County, and TxDOT formed the “*San Antonio Bexar County Urban Transportation Study (SABCUTS)*”
- 1977 The Governor designated the SABCUTS Steering Committee as the official MPO for the San Antonio area.
- 1978 VIA was created and joined the MPO.

MPO Make-up



- Members include
 - City of San Antonio – Councilmembers Julián Castro, Carroll Schubert, Ron Segovia, Joel Williams; Staff members Tom Wendorf, Emil Moncivais
 - Bexar County – Commissioners Lyle Larson, Tommy Adkisson, Robert Tejeda; Staff member Gabriel Perez
 - State of Texas – Senator Jeff Wentworth, Representative Ruth Jones McClendon, Staff members David Casteel, Clay Smith
 - VIA Metropolitan Transit - Tim Tuggey, Oliver Hill
 - *24 Suburban cities - Mayor James Carroll (Universal City)
 - Northeast Partnership - Amy Madison (Schertz)
 - Alamo Area Council of Governments - Al Notzon
 - Ex Officio – John Milam, Doug Lipscomb, Tom Griebel

***24 Suburban Cities**



Alamo Heights	Helotes	Selma
Balcones	Hill Country	Schertz
Heights	Village	Shavano Park
Castle Hills	Hollywood	Somerset
China Grove	Park	St. Hedwig
Converse	Kirby	Terrell Hills
Elmendorf	Leon Valley	Universal City
Fair Oaks	Live Oak	Windcrest
Ranch	Lytle	
Grey Forest	Olmos Park	



MPO Activities

- Urban Transportation Planning
 - Metropolitan Transportation Plan (MTP)
 - 25-yr long-range plan. Current MTP reflects \$10 Billion in improvements over 25 years.
 - Transportation Improvement Program (TIP)
 - 3-yr short-range improvement plan projects
 - Unified Planning Work Program (UPWP)
 - Annual transportation planning studies



UPWP Studies (1998-2002)

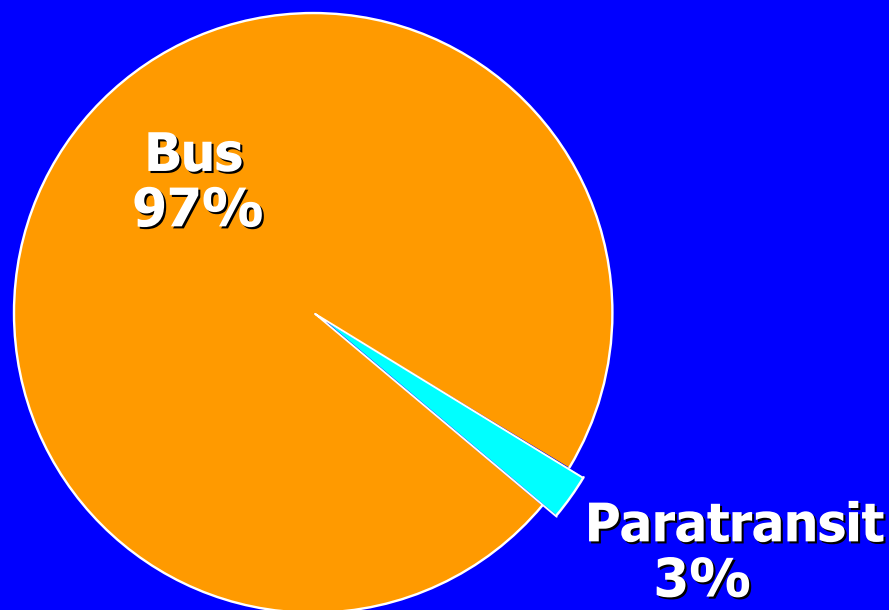
- Air Quality Planning
- Bicycle Route Suitability Study
- Brooks City-Base Area Infrastructure Development Plan
- Congestion Management System
- Downtown Visitor and Transportation Center Study
- East Corridor Multi-Modal Alternatives Plan
- Historical Trolley Feasibility Study
- Incident Management System
- Multi-Modal Downtown Improvement Plan
- On-Board Transit Origin/Destination Survey
- On-Street Space Management Plan
- Pedestrian Facilities Management System
- Query Station Development and Implementation
- Regional Transportation Attitude Study
- Regional Corridor Plan
- San Antonio/Austin Commuter Rail Feasibility Study
- School Zone Flashing Beacon Effectiveness Study
- Title VI and Environmental Justice Project
- Traffic Signal Re-timing Study
- Transit Travel Time Enhancement Study
- Transportation and Land Use Project

VIA's Mission

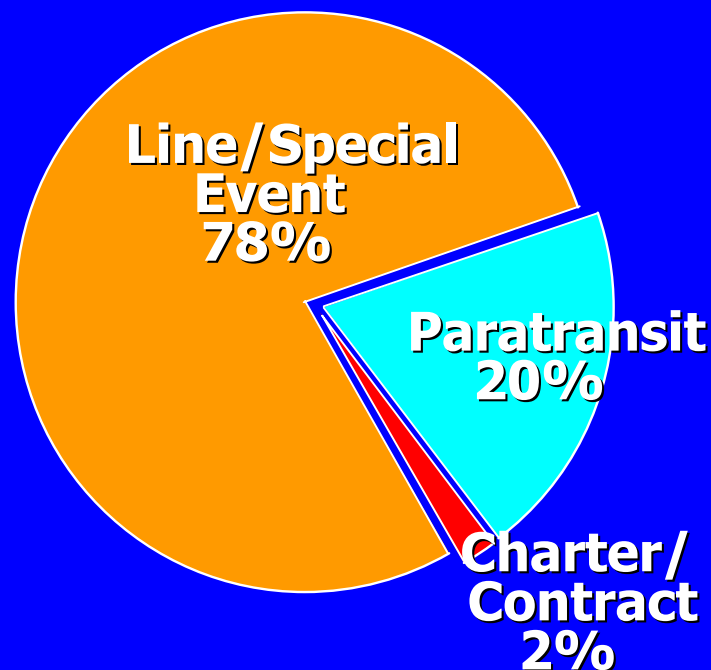
“To provide first class public transportation services that are safe, dependable, and cost effective, thereby enhancing the environment and quality of life in our community.”

VIA's Financial Distribution

FY 2003 Ridership



FY 2003 Expenses

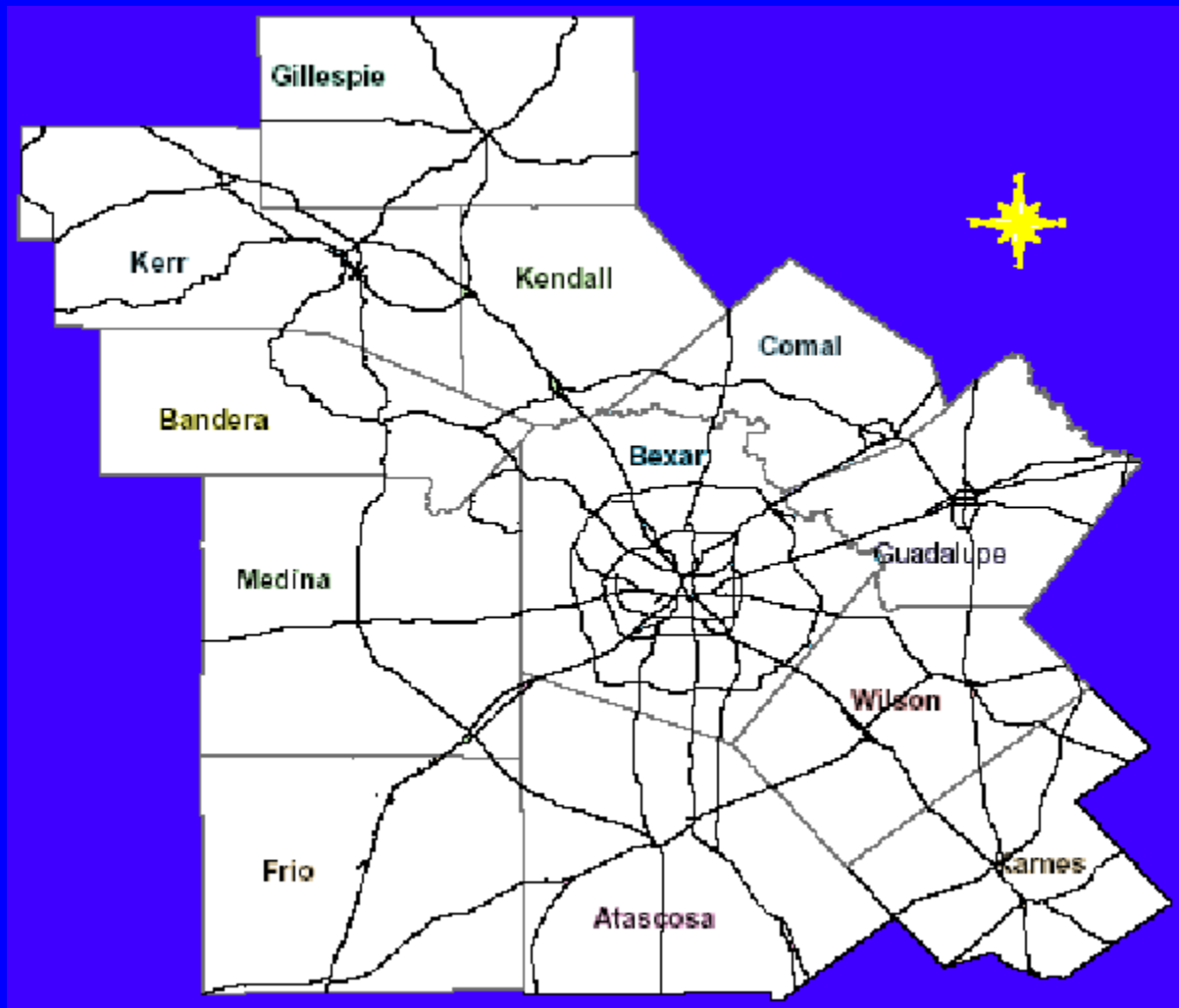


- VIA provides almost 38 million passenger trips per year
- Federally-mandated paratransit:
 - 20% of expenses, 3% of ridership

History of AACOG

- In 1968, the Texas Legislature established the Alamo Area Council of Governments as a voluntary association of local governments and organizations.
- In 1974, the Governor designated AACOG as the MPO for the San Antonio area. (As previously noted, this designation was redirected to the SABCUTS in 1977.)
- AACOG's geographic area covers 12 counties in the San Antonio region.

12-County Region



AACOG Primary Activities

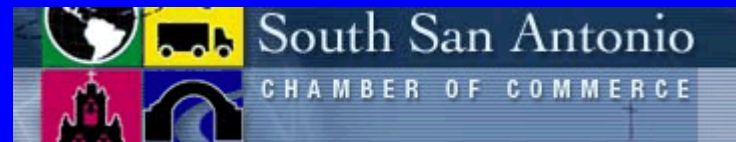
- 9-1-1
- Air Quality
- Regional Demographics Data Center
- Rural Public Transportation
- Workforce Development
- Senior Services
- Rural Aging Programs
- Housing and Weatherization
- Grants

History of SAMCo



- The San Antonio Mobility Coalition was organized in 2001 as a non-profit corporation.
- Funded by private and public sectors.
- Successor to San Antonio Transportation Alliance (SATA).

SAMCO Make-up

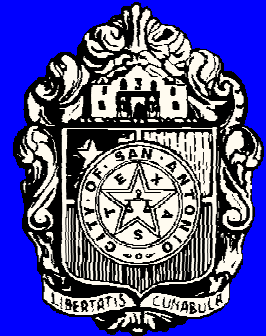
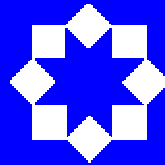


SAMCo's Mission



“To identify and advocate transportation and mobility solutions for the San Antonio Metropolitan area.”

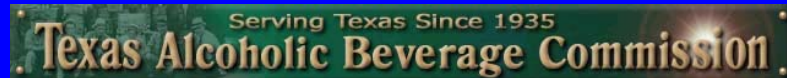
Traffic Jam Coalition



UNIVERSITY HEALTH SYSTEM



San Antonio Fire Department
EMS Division



Traffic Jam Coalition

- Group of local agencies, corporate partners, non-profit organizations, etc.
- Goal is to reduce fatal and injury traffic crashes
- Organized in 1996
- A current proposal is to ask City to require Fiesta sponsors/vendors, who sell alcohol, to include a “Drive Sober” message on its cups, mugs, etc.
- Project YIELD (Youth Informing Every Living Driver)
- “Put the Brakes on Fatalities” event

Transportation Funding History

MPO Transportation Improvement Program (TIP)



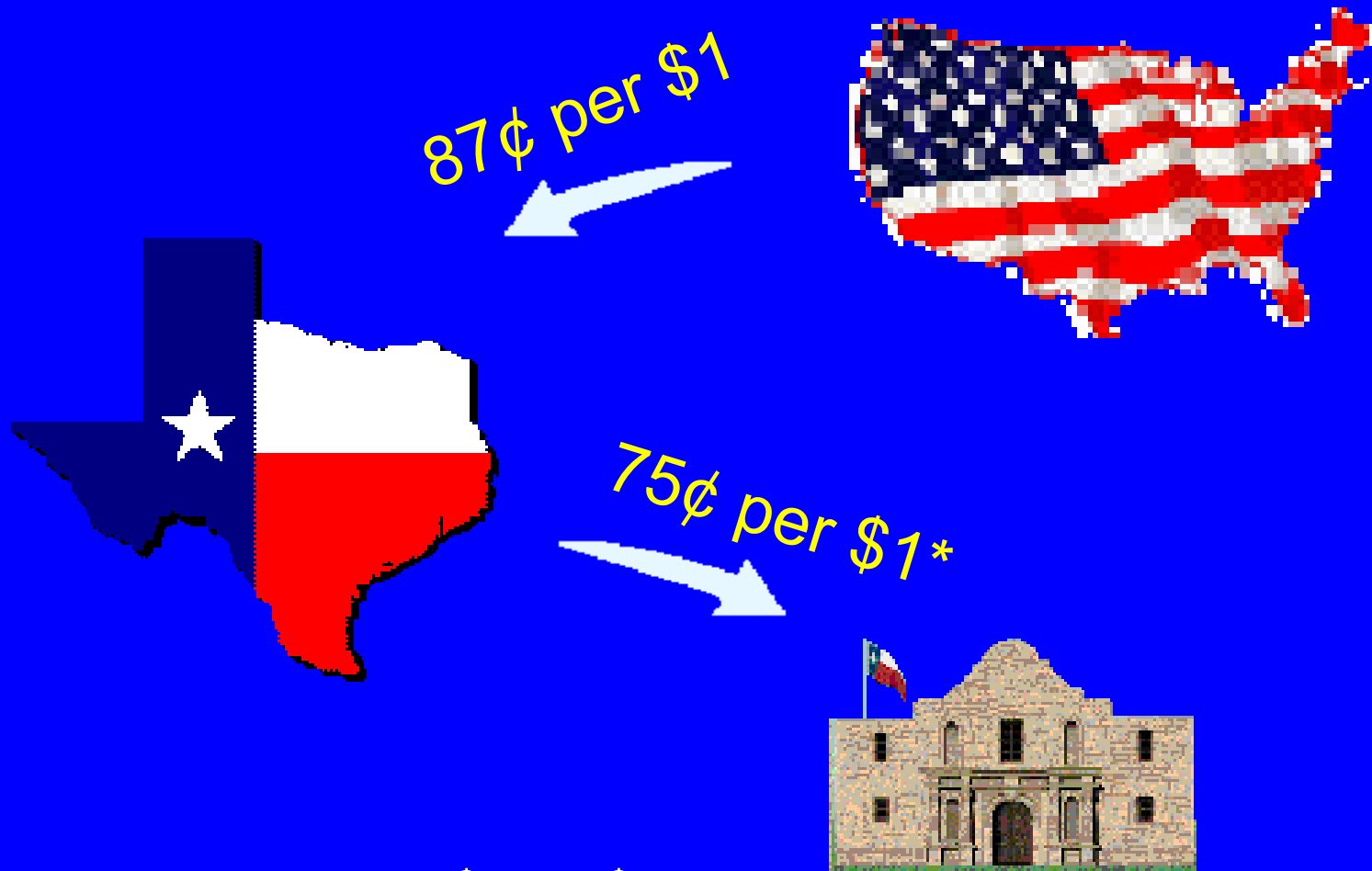
- The MPO historically held an annual “Call for Projects” to identify candidate projects for inclusion in the TIP.

Transportation Improvement Program Funding History



- Federal funds flow to local community via the MPO's TIP.
- Funding category for city streets is the Surface Transportation Program – Metro Mobility (STP - MM).

Historical Transportation Funding Flow



*Mobility Funds are now \$1 per \$1

Transportation Funding Flow, cont'd

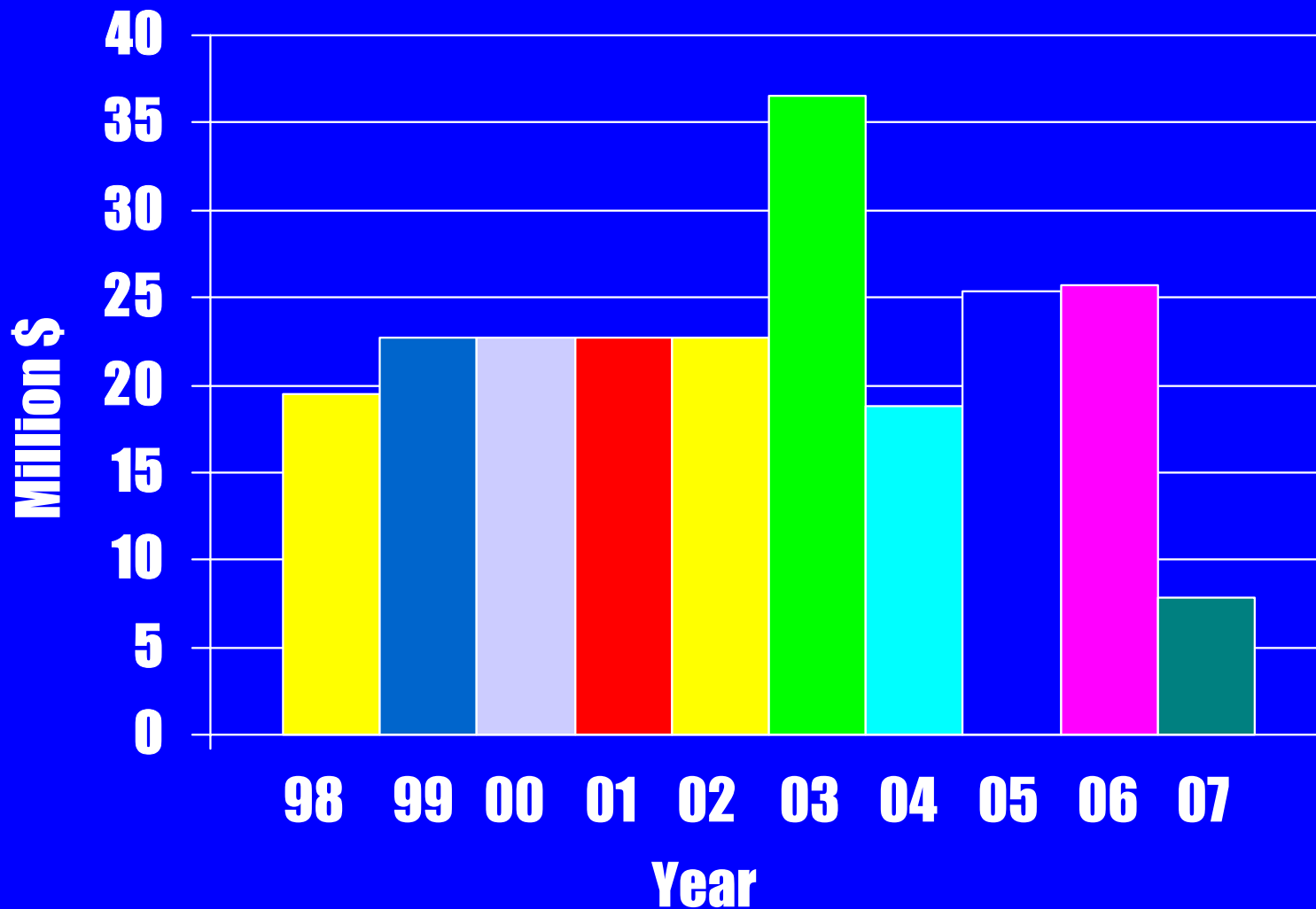
- The funds that flow from the federal government through the State do not support local residential streets (77% of centerline miles in San Antonio).
- They can apply to
 - State roadways, which are all numbered routes, e.g., IH 10, US 281, FM 1976 (Walzem), SH 16 (Bandera), Spur 422 (Poteet-Jourdanton), Loop 13 (SE/SW Military), etc.
 - City arterials and collectors, e.g., Military Drive West, Zarzamora, Bitters, etc.

Transportation Improvement Program Future



- Based on FY 2006, the MPO expected an FY 2007 allocation of \$21.6 Million in STP-MM funding.
- TxDOT's Transportation Planning and Programming Division recently released funding levels for the FY 2007 TIP. The San Antonio area MPO is set to receive only \$7.8 Million in STP-MM funding.

STP – MM Funding History





History of TTC Funding

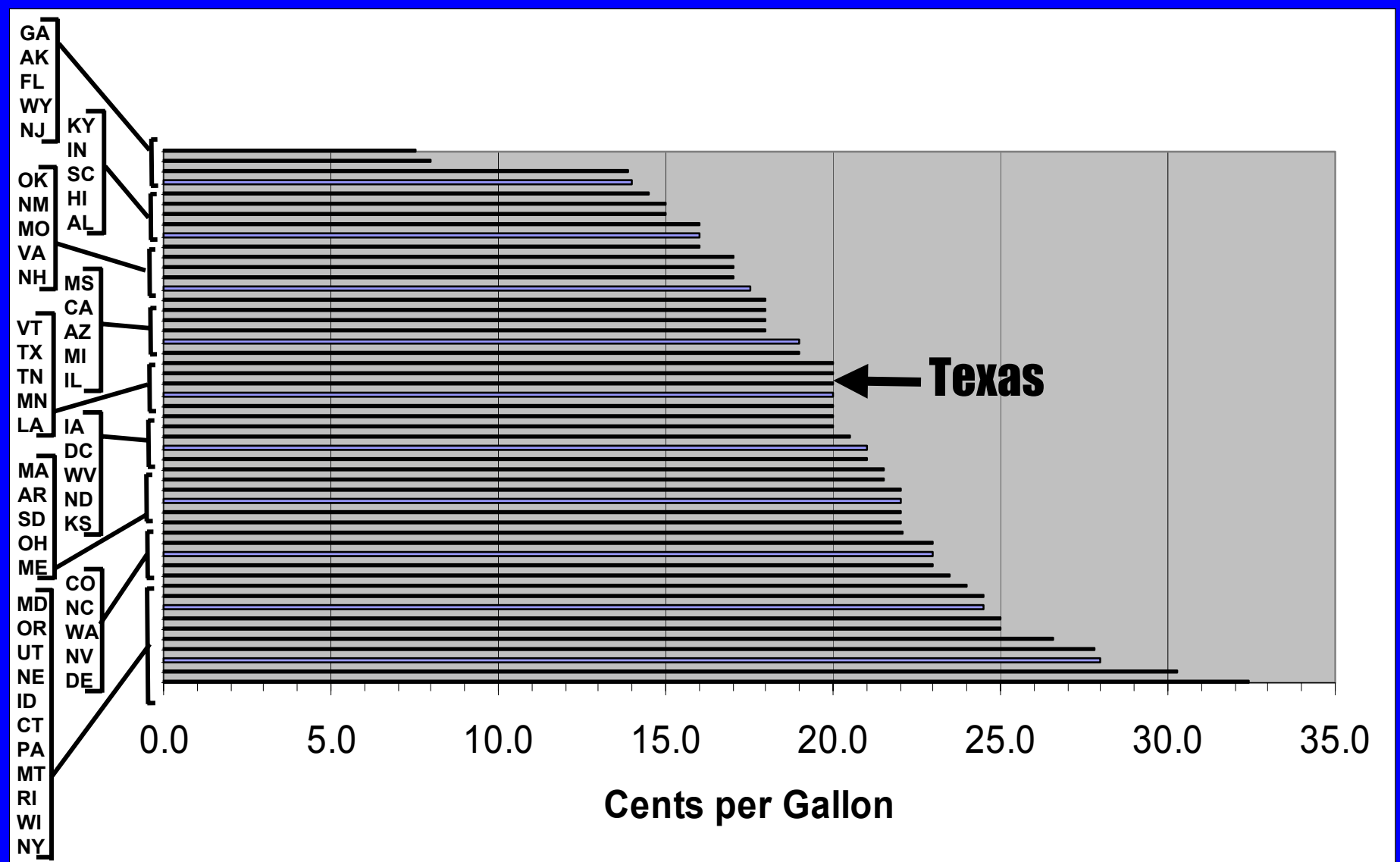
- The Texas Transportation Commission (TTC) historically provides discretionary funding for special projects with an 80/20 funding formula.
- TTC prefers to fund projects for which the local community funds a share greater than 20%.
- Other large metro areas in Texas have succeeded in capturing TTC funding because they have brought more than 20% to the table.
- In many instances, the City of San Antonio acquired Right-of-Way to speed project delivery.



Gasoline Tax

- Texans pay a gasoline tax of 38.4¢ per gallon.
 - Federal government receives 18.4¢ per gallon
 - No increase since 1993
 - State government receives 20.0¢ per gallon
 - No increase since 1991 (previously 15.0¢ per gallon)
 - Ranks 26th among 50 States
 - $\frac{1}{4}$ goes to education (5.0¢)
 - $\frac{3}{4}$ goes to transportation (15.0¢)

State Gasoline Tax Rates



City Bond Program



- The primary tool for funding mobility projects on the City street network has been the use of Bond Programs.
- The 1999 General Obligation Bond Program included funding for matching MPO TIP project funds (\$21.6 M).
- The 2003 General Obligation Bond Program does not include any matching funds because the TIP has no “Call for Projects.”

Federal Funding

- 1991 – Intermodal Transportation Efficiency Act (ISTEA)
 - Expired September 30, 1997
- 1997 – Transportation Equity Act for the 21st Century (TEA-21)
 - Began December 1997
 - Expired September 30, 2003
 - Extension granted for 5 months (February 29, 2004)
- 2004 – Reauthorization is expected

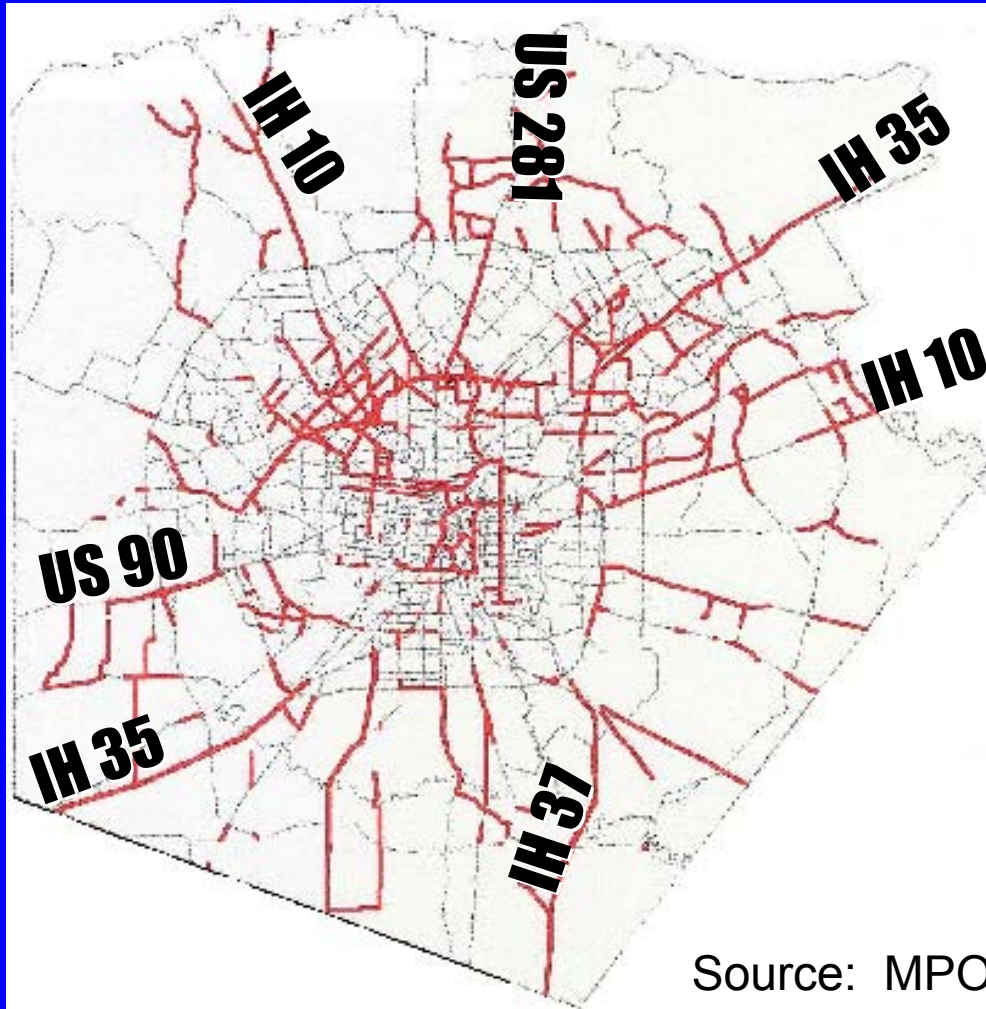
TEA 21 Reauthorization Bill - Requested Earmark Projects (Priority Order)

- | | |
|------------------------------------------|----------|
| 1. Medical/Fredericksburg Underpass | \$ 10.0M |
| 2. Mission Trails Hike and Bike Trail | \$ 5.0M |
| 3. ITS Technologies | \$ 4.0M |
| 4. New Luke Road Trade Corridor | \$ 8.0M |
| 5. ITS Linkage to Corpus Christi | \$ 4.0M |
| 6. Bus Rapid Transit – Fredericksburg Rd | \$ 24.0M |
| 7. Kelly Parkway Right-of-Way | \$ 9.6M |
| 8. Loop 410 at Freeport | \$ 8.2M |

Funding Tools

- Bexar County Road and Bridge Fee
- General Obligation Bonds
 - City
 - County
- Sales Tax
- MPO STP-MM
 - Local MPO Policy 6 requires up to 25% of annual STP-MM funds be set aside for use as matching funds for Texas Transportation Commission discretionary funding opportunities.

Future Congestion on City Arterials



Source: MPO

- This shows State, County and City roadways that will be congested by 2025.
- City roadways
 - There are 125 miles of City roadways in this group.

Estimated Cost to Add Capacity to City Arterials



Estimated cost, in current dollars, to add capacity to the 125 centerline miles of projected (2025) congested City arterial streets.

\$ 700 Million

2003 City Bond Package



- \$115 Million, total
 - \$29 Million, street recapitalization projects

(System preservation)

Transportation Issues and Drivers



Air Quality Standards

If San Antonio is designated as Non-Attainment,

- Congestion Management Air Quality (CMAQ) Program funds are available.
- Current entities will not let us get into the CMAQ funds
- Bottom Line:
 - No capacity improvement projects with federal funds
 - Possible significant limit on large economic development projects in the community.

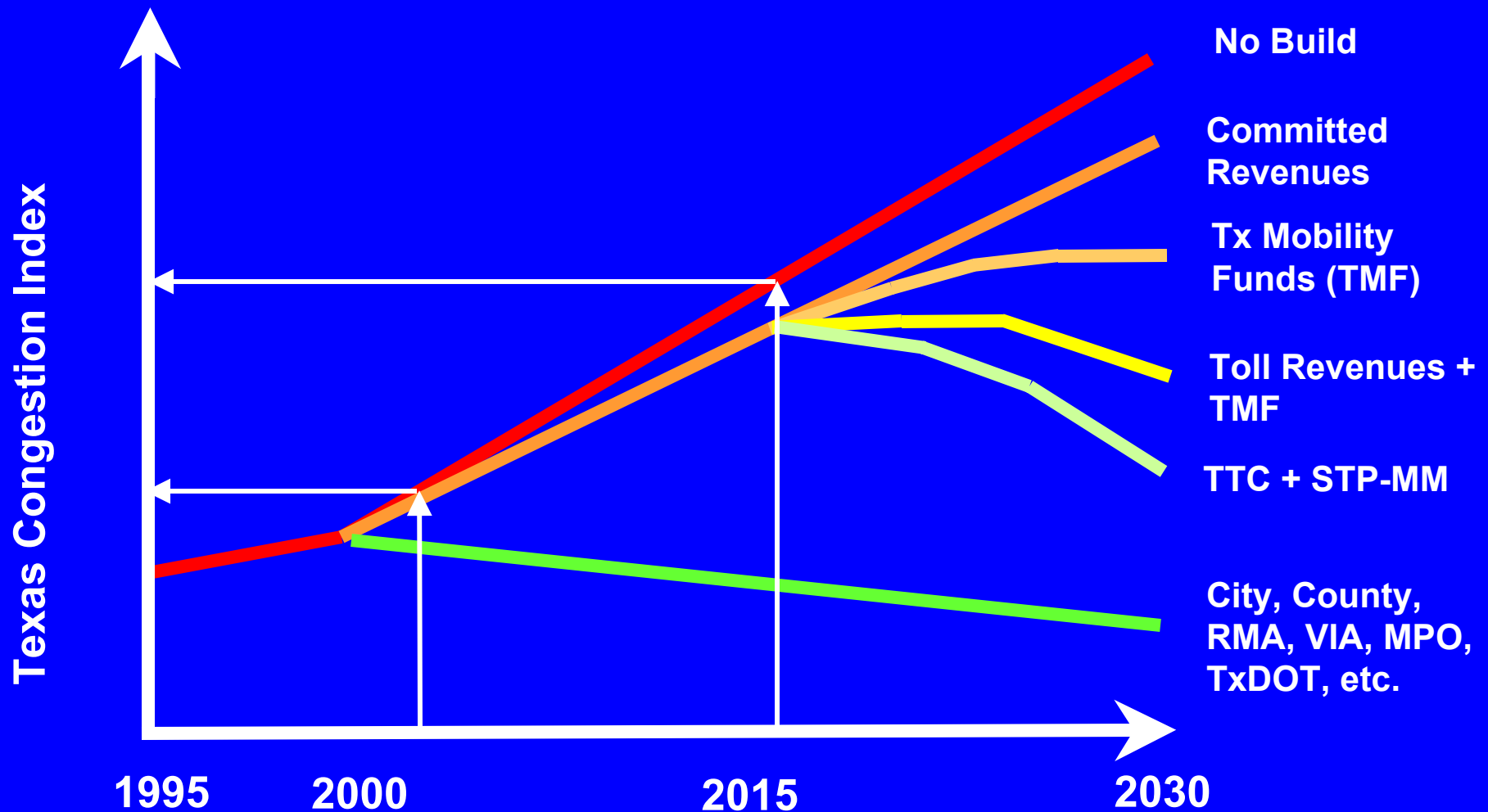
Future of Gasoline Tax

- Increasingly fuel-efficient motor vehicles have reduced the number of gallons sold and thereby reduced tax revenues, relative to “vehicle-miles of travel.”
- Future improvements in fuel efficiency will further reduce tax revenue forecast significantly.
 - Electric and hybrid electric/gasoline vehicles
 - Fuel cell technology

Distinction between Transportation Funding Uses

- Capacity Improvements
(i.e., mobility projects)
- Maintenance Improvements
(i.e., preservation projects.)

Texas Metropolitan Mobility Plan



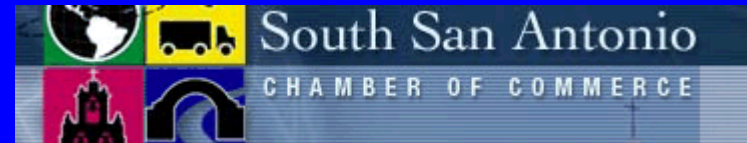
Managing Existing Roadway Capacity -

Locally and in the Near Term

Collaboration, Cooperation and Communication among Transportation Agencies



Alamo Area Council of Governments
AACOG



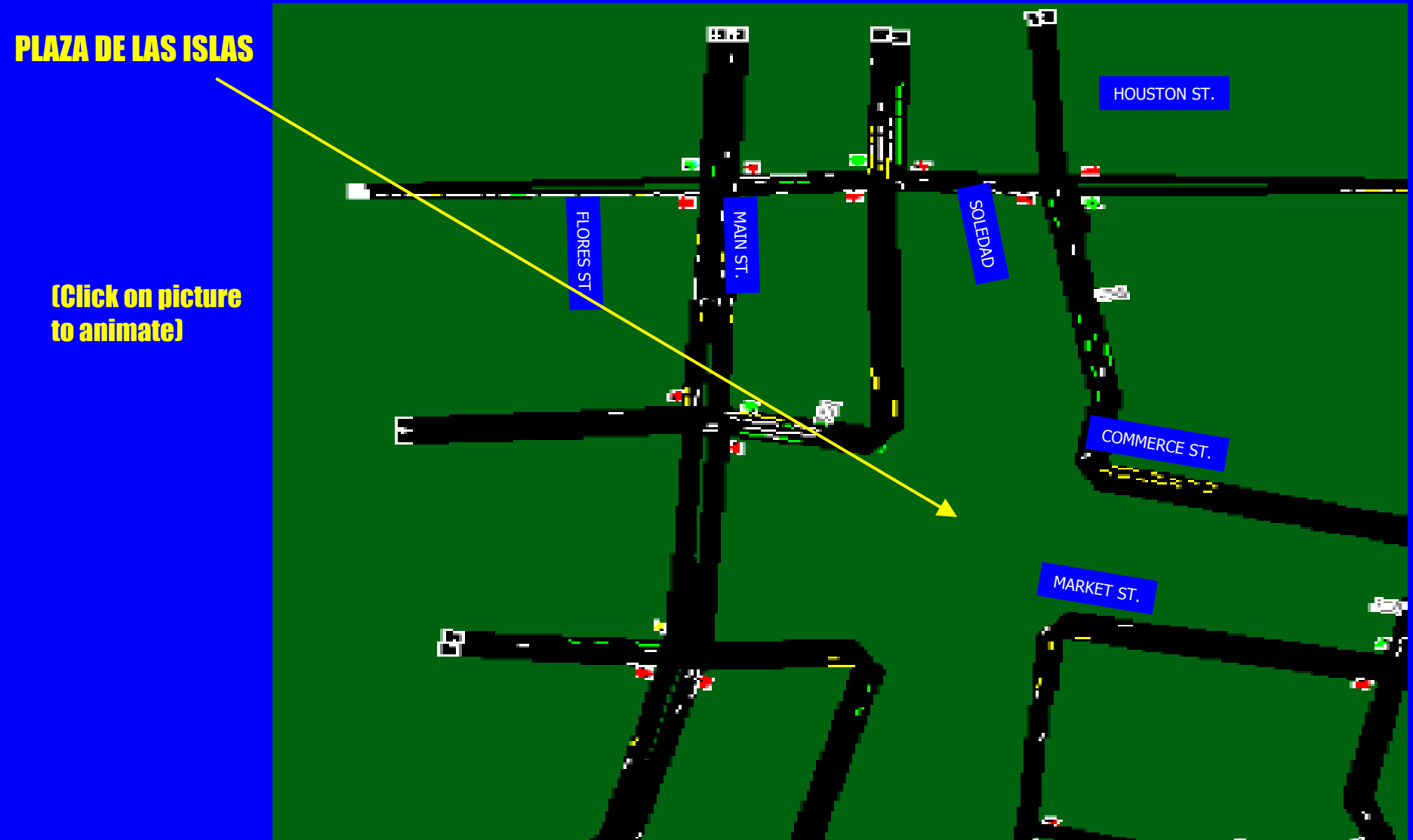
Matching School Zone Times to Actual Student Walking Times



Coordinated Traffic Signal Systems



Traffic Simulation Model - Downtown



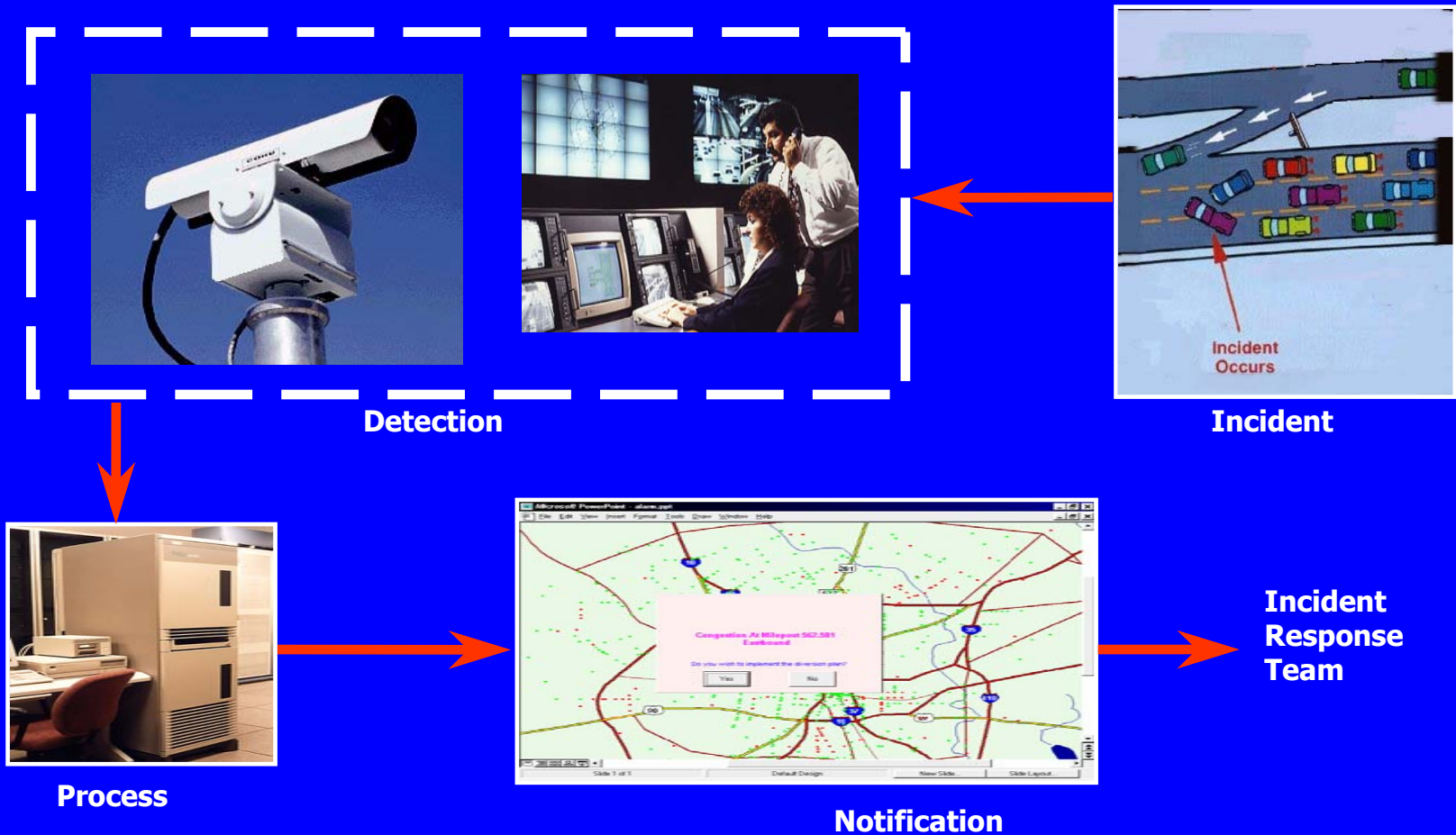
Flex Time and Alternate Work Schedules



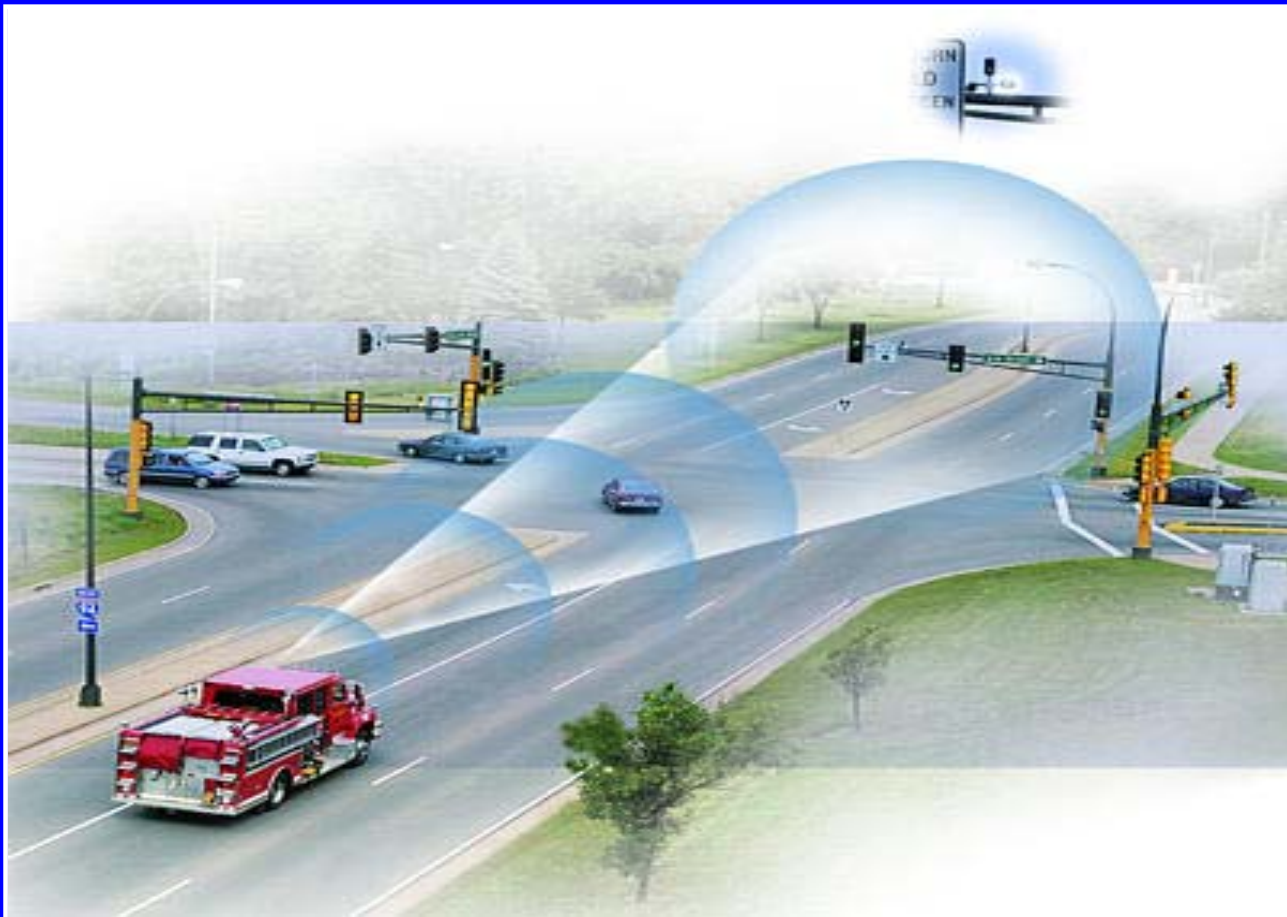
Ride sharing, Carpooling and Park-N-Ride



Incident Management



Emergency Vehicle Signal Pre-Emption System



Reversible Lane System

Typical "Lane Control Signal"
on SBC Center Parkway



Managing Existing Roadway Capacity –

Locally and in the Mid to Long Term

Deploy ITS to City Streets



Source: TxDOT



Source: Texas Transportation Institute

**Facilitating Multi-Modal
Transportation and Emergency
Evacuation**



Video Imaging Vehicle Detection Systems



Increase Transit Use



Auto-Restricted Zones



Bus Rapid Transit



Transit-Oriented Development



Managing Roadway Capacity

- Intelligent Transportation Systems (ITS)
 - Motorist information system (pager, website, in-vehicle display, etc.)
 - Freeway dynamic message signing
 - Reversible lanes
 - Automated enforcement
 - Red Light Running
 - Speeding
 - Traffic Adaptive Signal Systems
 - Emergency Vehicle Signal Pre-Emption

Benefits of Regional Cooperation in Intelligent Transportation Systems



Regional Transportation Improvements/Developments

- Regional ITS
- Multi-Modal Transportation and Emergency Evacuation
- Trans Texas Corridor
- High Speed Rail
- Texas T-Bone

Emergency Evacuation – Corpus Christi Example



Multi-Modal Transportation and Emergency Evacuation



Source: Texas Transportation Institute

Multi-Modal Transportation and Emergency Evacuation



Source: TxDOT

Multi-Modal Transportation and Emergency Evacuation



Source: 3M Traffic Control Materials

Trans Texas Corridor



Trans Texas Corridor



High Speed Rail



“Texas T-Bone”



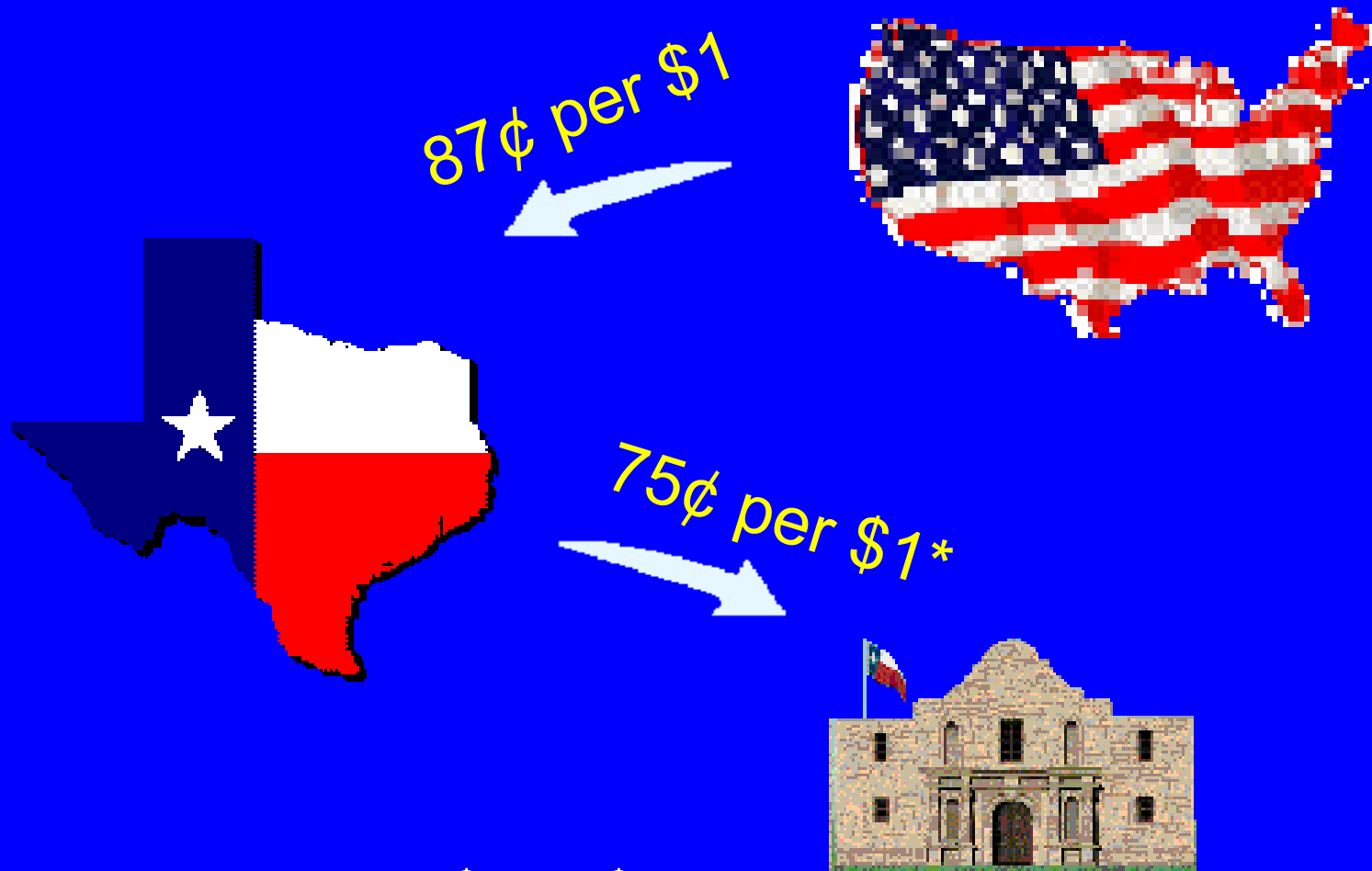
New Transportation Funding Tools

New TTC Funding Policy



- The Texas Transportation Commission approved a funding allocation policy through the new *Texas Metropolitan Mobility Plan*.
- TxDOT will change from allocating mobility funds on a “per project” basis to allocating funds to regional metropolitan areas.
- \$250 Million of the Texas Mobility Fund is estimated to be available for the San Antonio area.
- Regional allocations will be based on TxDOT’s assessment of traffic, population, and other factors.
- This will provide a measure of funding predictability to local areas.
- Toll feasibility

Historical Transportation Funding Flow



*Mobility Funds are now \$1 per \$1



House Bill 3588

- Approved May, 2003.
- Multifaceted Legislation (20 articles)
 - Trans Texas Corridor
 - Regional Mobility Authorities
 - Advance Acquisition of Right-of-Way
 - Rail
 - etc.
- Funding \$3 Billion in bonding capacity, paid through future traffic fine revenues

Existing Funding Tools

- Regional Mobility Authority (RMA)
 - Determine feasibility of immediately funding improvements to non-toll facilities from future excess toll revenues generated from toll roads.

Regional Mobility Authority

RMAAs are new creations of the State that operate much like existing toll authorities in North Texas and Harris County.

- can build, operate, and maintain newly created toll projects,
- Provide a new financing tool which allows local governments to construct, maintain
- Operate a turnpike project as part of the State highway system.

Benefits of RMAs

- Reduce time required to implement highway project
- Issue bonds
- Generate toll revenue
- Excess revenues can be transferred to the Texas Mobility Fund or used for additional transportation projects in this area
- Allows local authorities to build local priority projects that might not receive sufficient State or federal funding

Eligible RMA Projects

- Public transit facilities and equipment
- Passenger rail or freight facilities
- Rail preservation
- Turnpike project
- Pedestrian and bicycle transportation facilities
- Projects in TxDOT's Unified Transportation Plan
- Commercial service airports
- Projects in MPO's Long Range Plan
- Gulf Intercoastal Waterway

RMA Board Composition

- Chair, appointed by Governor
- 2 or more other members, appointed by County Commissioners Court
- Staggered 6-yr terms

Wrap Up

- Unified City Vision
- Continue Developing Community Awareness
- City Council's Strategic Plan
- Develop “in house,” based on discussions with Council members within the next 3 to 6 months.
- Set a Strategy on How to Address the Transportation System
- B Session

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